Patent claims

1. An operating method for a high-pressure discharge lamp having a light-permeable discharge vessel (1), which surrounds a discharge space (10) having an essentially cylindrical geometry, in which electrodes (2, 3) and an ionizable filling are arranged for the purpose of generating a light-emitting gas discharge, characterized in that the high-pressure discharge lamp is operated using an essentially sinusoidal current at a frequency which is in a frequency range above 30 kilohertz and which is free from acoustic resonances.

2. The operating method as claimed in claim 1, characterized in that the frequency range is between two adjacent acoustic resonant frequencies.

3. The operating method as claimed in claim 2, characterized in that the frequency range is between two adjacent fundamental frequencies of acoustic resonances.

4. The operating method as claimed in claim 1, characterized in that the high-pressure discharge lamp is operated at a first, higher power immediately after starting the gas discharge and at a second, lower power once steady-state operation has been achieved, the frequency of the current through the lamp being set to a first value from the frequency range for the purpose of setting the first, higher power, and the frequency of the current through the lamp being set to another, second value from the frequency range for the purpose of setting the second, lower power.